

Majority					
10	20	30	40	50	60
MAESSDKLYRVEYAKSERASCKKCSSESI	PKDSL	RMAIMVQSPHFDDGKVPIIWHYPSCFWKV			humanPARP1
MAAR					humanPARP2
MS					humanPARP3
M					murinePARP
Majority					
70	80	90	100	110	120
GHSIRIIPDVEVDGFSSELRLWDDQQKVKKKTAEAGGVTTGGKQDGGIGSKAEKTLQDFAAEYAKS					humanPARP1
					humanPARP2
					humanPARP3
					murinePARP
Majority					
130	140	150	160	170	180
HRSTCKGCHEKIEKGQVRLSKKMHVDPEKPKQLGHIIDRWYHPQCPVKNRREELGFRPEYSAQ					humanPARP1
					humanPARP2
					humanPARP3
					murinePARP
Majority					
190	200	210	220	230	240
LKGFSLLAATEDK EALKKQLPQVKSSEGGKHKGGKVDGVDEVAKKKSKKKEKD KLSKLEKALKA					humanPARP1
					humanPARP2
					humanPARP3
					murinePARP
Majority					
250	260	270	280	290	300
QNDLIWNIKDELKKVCSTHDLKELLIFNKQQVPSGESAILDRVADGMVFGALLPCEECSG					humanPARP1
					humanPARP2
					humanPARP3
					murinePARP

Fig. 1(1)

	310	320	330	340	350	360	Majority
301	Q L V P K S D A Y Y C T G D V T A W T K C M V K T Q T P N R K E W V T P K E F R E I S Y L K K L K V K K Q D R I F P P E						humanPARP1
88	K V G - - K A H V Y C E G N - - - - -						humanPARP2
9	- - - - -						humanPARP3
2	- - - - -						murinePARP
	T E G S - - - - -						Majority
361	T S A S V A A T P P P S T A S A P A A V N S S A S A D K P L S N H K K I L T L G K L S R N K D E V K A H I E K L G G K L T						humanPARP1
100	- - - - -						humanPARP2
18	T E G P - - - - -						humanPARP3
11	T E G S - - - - -						murinePARP
	- - - - -						Majority
421	G T A N K A S L C I S T K K E V E K M N K K M E E V K E A N I R V V S E D F L Q D V S A S T K S L Q E L F L A H I L S P						humanPARP1
100	- - - - -						humanPARP2
22	- - - - -						humanPARP3
15	- - - - -						murinePARP
	- - - - -						Majority
481	W G A E V K A E P V E V V A P R G K S G A A L S K K S K G Q V K E E G I N K S E K R M K L T L K G G A A V D P D S G L E						humanPARP1
100	- - - - -						humanPARP2
44	- - - - -						humanPARP3
35	- - - - -						murinePARP
	- - - - -						Majority
541	H S A H V L E K G K V F S A T L G L V D I V K G T N S Y Y K L Q L L E D D K E N R Y W I F R S W G R V G T V I G S N K						humanPARP1
1000	- - - - -						humanPARP2
73	- - - - -						humanPARP3
44	- - - - -						murinePARP

Fig. 1(2)

0050/49100/49790

3/7

601	LNHFTX - LEDAKEDFXKFKFXEKTNNWEEERDXFVKXKPGKYTTLLLEVUY - XEXEDEEVA VVK - Majority	610	620	630	640	650	660
149	LEQHPSK - ED A I E H F H K L Y E E K T G N A W H S K N - F T K Y P K K P Y P L E I D Y G - - - Q D E E A V K K - humanPARP1	610	620	630	640	650	660
119	LVACSGH LHKAKAEI P Q K K F L D K T K N N W E D R E K F E K V P O K K Y D N L Q M D Y A T N T Q D E E T K K E humanPARP2	610	620	630	640	650	660
109	INHPT R - LEDAKKODP E K K F R E K T K N N W A E R D H P V S H P P O K K Y T L I E V Q - - A E D E A O E A V V K - humanPARP3	610	620	630	640	650	660
	HNHFTC - LEDAKKDP K K K F F W E K T K N K W E E R D R E V A Q P N K Y T L I E V Q - - G E A E S Q E A V V K A murinePARP	610	620	630	640	650	660
	- SLXVDXGVPVSTVXKRVQPCSLDPATQXLI TN I F S V E M P K N A M X L M X L D V K K M P L G K L S K Majority	610	620	630	640	650	660
655	- LTVNPGTKSKLPKPVQ - - - - - D L I K H I P D V E S H K K A N V E Y E I D L Q K M P L G K L S K humanPARP1	670	680	690	700	710	720
209	ESLKSPLKPE S O L D L R V O - - - - - E L I K L I C H V Q A H E E M H M E M K X Y N T K K A P L G K L T V humanPARP2	670	680	690	700	710	720
175	- - - - - V D R G P V R T V T K R V Q P C S L D P A T Q K L I T N I F S K E H P K N T M A L M D L D V K K M P L G K L S K humanPARP3	670	680	690	700	710	720
166	LSPOVDSG P V R T V V K - - - P C S L D P A T Q N L I T N I F S K E H P K N A M T L M N L D V K K M P L G K L T K murinePARP	670	680	690	700	710	720
	Q Q I A A G F R A L E A L E E A X K X G T X G G Q S L E E L S S X P Y T V I P H D F G X S X P P L I N S P D X L Q A K K Majority	670	680	690	700	710	720
704	ROIAAY S I L S E V Q Q A V S Q O S S D S Q I L D - L S N R F Y T L I P H D P G M K K P P L L N N A D S V Q A K V humanPARP1	730	740	750	760	770	780
260	AQIKAGYQS L K K I E D C I R A G O H G R A L M E - A C N E F Y T R I P H D F G L R T P P L I R T Q K E L S E K I humanPARP2	730	740	750	760	770	780
231	QO I A R G F E A L E A L E E A L K G P T D G G Q S L E E L S S H P Y T V I P H N F G H S Q P P P I N S P E L L Q A K K humanPARP3	730	740	750	760	770	780
223	QO I A R G F E A L E A L E E A L K G P T D G G Q S L E E L S S C F Y T V I P H N F G R S R P P I N S P D V L Q A K K murinePARP	730	740	750	760	770	780
	DHLVLADIE LA Q X L Q A X X E X S X K V E B V P H P L D R D Y Q L L K C Q L Q L D S Q S X E Y K V I Q T Y Majority	730	740	750	760	770	780
763	EHL D N L L D I E V A Y S L R G G S D D S K - - - - - D P I D V N Y E K L K T D I K V V D R D S E E A E I I R K Y humanPARP1	790	800	810	820	830	840
319	QLLEALG D I E I A I K L V K T B L O - S P E - - - - - H P L D Q H Y R N L I C A L R P L D H E S Y E F K V I S O Y humanPARP2	790	800	810	820	830	840
291	DHMLLV L A D I E L A Q A L Q A V 9 - E Q E K T V E E V P H P L D R D Y Q L L K C Q L Q L D S O A P E Y K V I Q T Y humanPARP3	790	800	810	820	830	840
283	DHMLLV L A D I E L A Q A L Q A V 9 - E Q E K T V E E V P H P L D R D Y Q L L K C Q L Q L D S O A P E Y K V I Q T Y murinePARP	790	800	810	820	830	840
	LKQTGA XT H C P Y - - T L X D I P K V E R E G E X D R F Q A H S K L O H R R L L W H G S N H A V V A Q I L S S G L Majority	790	800	810	820	830	840
818	VKNTHA T T H N A Y D L E V I D I F K I E R E G E C Q R Y K P P K O L H N R R L L W H G S R T T N F A Q I L S O O L humanPARP1	850	860	870	880	890	900
373	LQSTHA P T H S D Y T H T L L D L P E V E K D G E K A F R - - E D L H N R R L L W H G S R M S N W V Q I L S H G L humanPARP2	850	860	870	880	890	900
350	LEQTGS N H R C P - - - T L Q H I W K V N Q E O E E D R P O A H S K L O H R R L L W H G T N M A V V A I L T S G L humanPARP3	850	860	870	880	890	900
343	LKQTGS N S Y R C P - - - N L R H V W K V N R E G E G D R P O A H S K L O H R R L L W H G T N V A V V A I L T S G L murinePARP	850	860	870	880	890	900

Fig. 1(3)

0050/49100/49790

4/7

	910	920	930	940	950	960	Majority
878	R I A P P E A P V T G Y H F G K G I Y F A D H V S K S A N Y C H T S Q						humanPARP1
431	R I A P P E A P I T G Y H F G K G I Y F A D H S S K S A N Y C P A S R						humanPARP2
407	R I H P H - - - S G R V G K G I Y F A S B N S K S A G Y V I G M K C G A H H V Q Y H F L G E V A L G G R E H H I N T D						humanPARP3
400	R I H P H - - - S G G R V G K G I Y F A S B N S K S A G Y V T T H H C O G H Q V Q Y N F L G E V A L G G K E H H I T I D						murinePARP
	N P S L K S L P P G K D S V I G L G K T E P D P A Q D I E L E L D G G V V V P L O P P V X C Q X F X S S X P S L - Y S						Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP
							Majority
							humanPARP1
							humanPARP2
							humanPARP3
							murinePARP

5/7

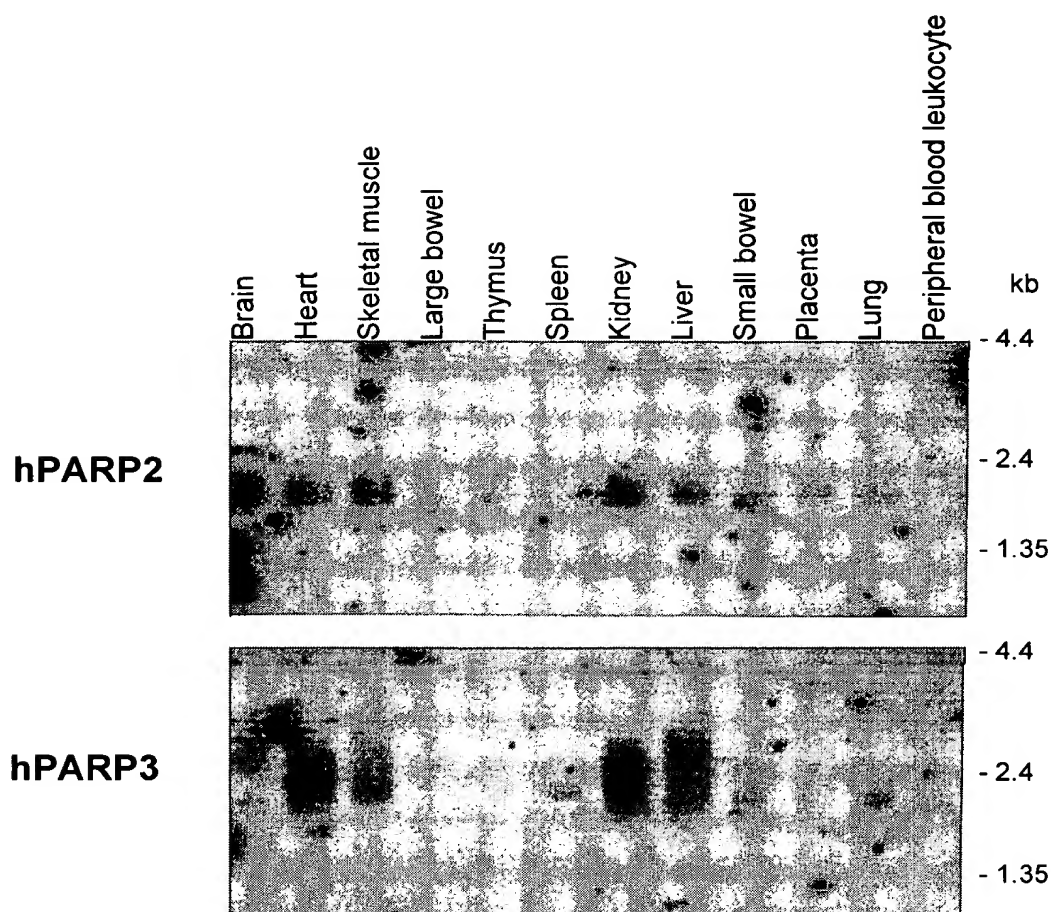
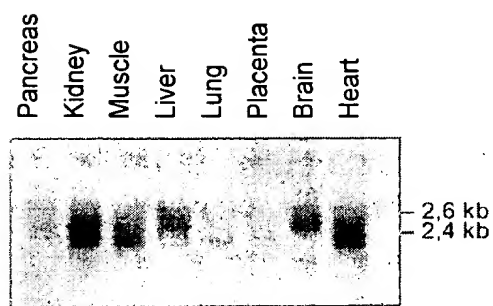
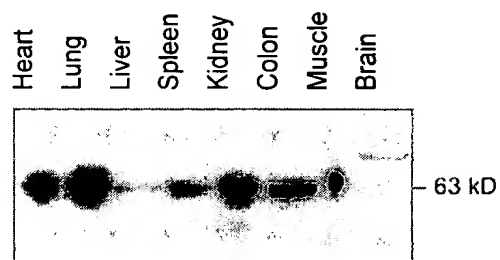


Fig. 2



Northern Blot Analysis
Human PARP3 Tissue Distribution

Fig. 3



Western Blot Analysis
PARP3 Tissue Distribution

Fig. 4

6/7

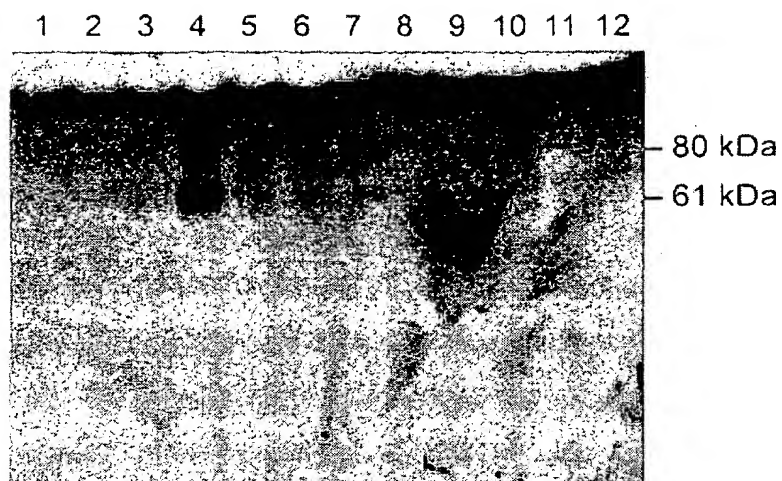


Fig. 5

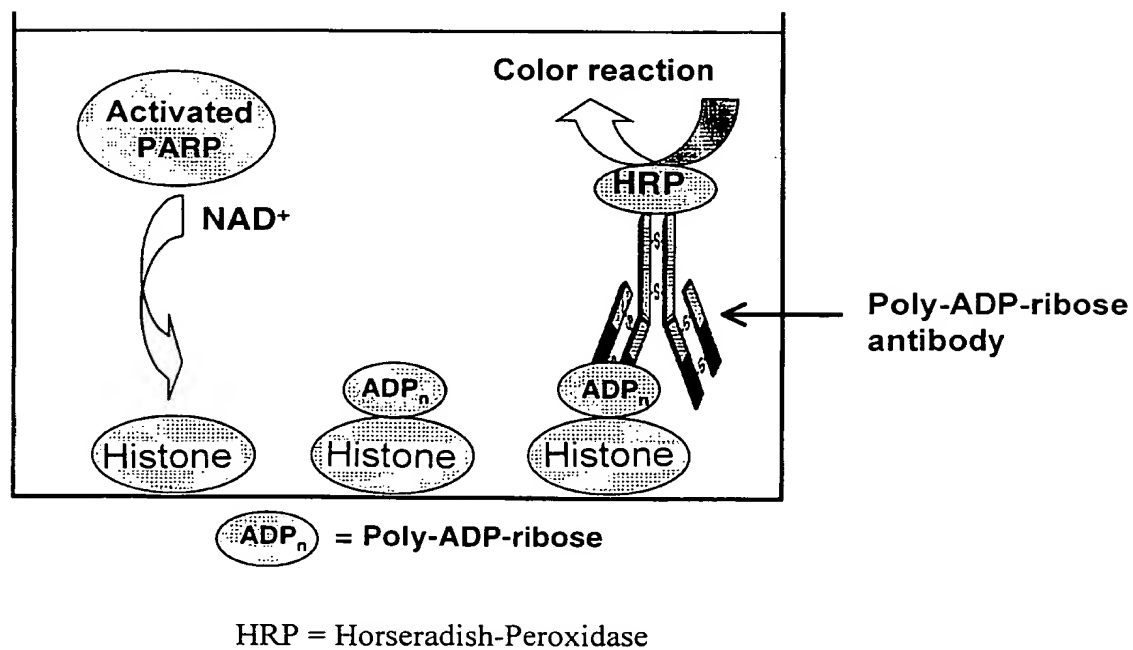


Fig. 6

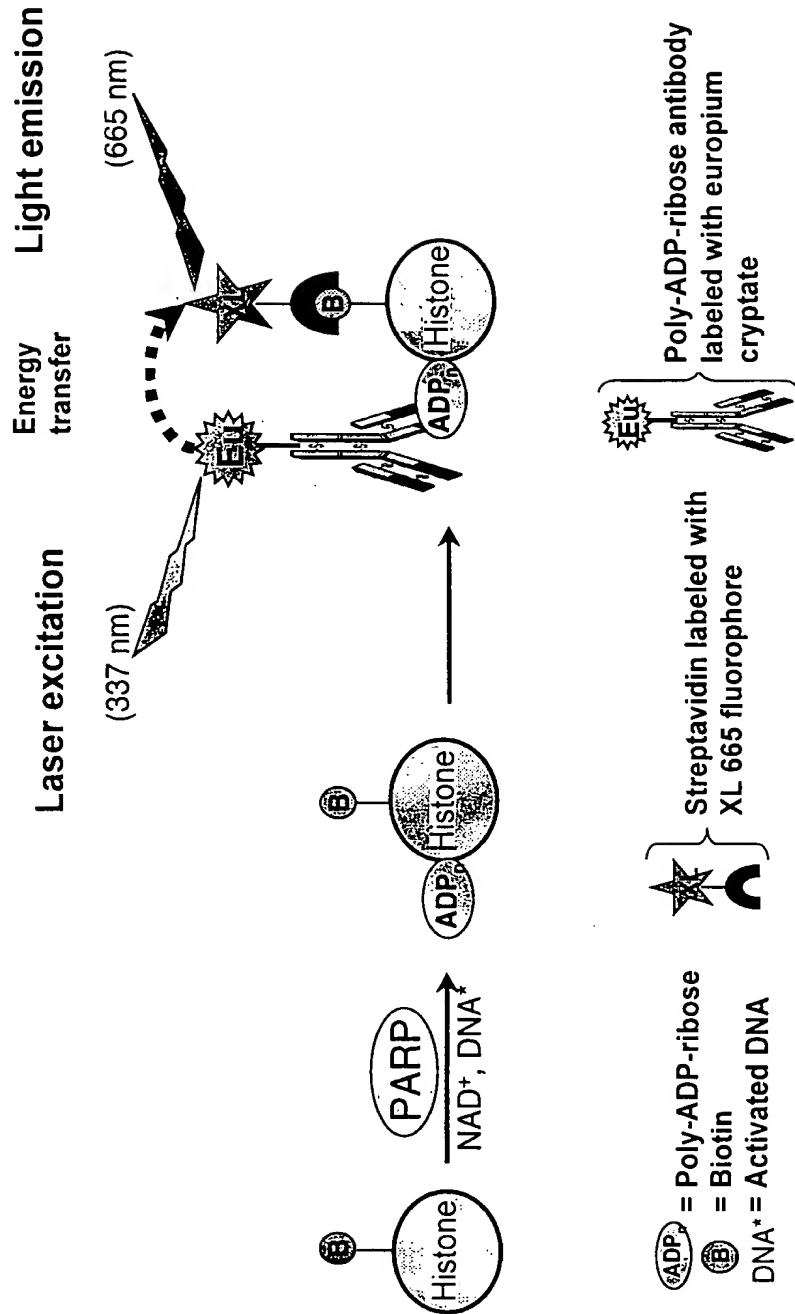


Fig. 7